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Small Town Development in ChinaA 21st Century Challenge

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hina has one of the world's fastest-growing economies and is expected to become an important player in the world economy with its accession to the World Trade Organization (WTO), but it is still a largely rural country. While China is an emerging force in hightech industry, the majority of its labor force still works on tiny semisubsistence farms, earning incomes a little over one-third of the urban average in China. Efforts to raise rural incomes are now a high priority in China, and the urgency is made greater by China's new WTO membership, which will expose China's farmers to competition from highly efficient overseas producers.

The success of China's rural development efforts is relevant not only for China, but also for farms and businesses in rural America, for whom their counterparts in rural China may be either customers or competitors. Many agricultural commodities and industrial goods produced in rural America may face competition from China. At the same time, rural economic

Fred Gale is a senior economist, Market and Trade Economics Division, Economic Research Service. Hongguo Dai is a senior statistician, China National Bureau of Statistics. China is placing a high priority on urbanizing and raising the incomes of its huge rural population. The government is pursuing a strategy that seeks to channel rural people into small cities and towns rather than large cities. This strategy faces challenges in creating jobs for new residents and financing new town construction. Farms and businesses in rural America may increasingly compete and do business with their counterparts in rural China as trade between the two countries increases.

growth and a more open market after WTO accession may create market opportunities in rural China for agricultural commodities, livestock, fertilizers, industrial machinery and equipment, and other products produced in rural America.

Late Start in Urbanization

The industrial revolution that played an important role in urbanizing Europe and North America was slow to take off in China. During the 19th and early 20th centuries, most modern industry in China was in a few coastal cities, and in 1949 the population was 89 percent rural. By comparison, the U.S. population was 89 percent rural in 1840, but the rural share was down to 40 percent by 1949. During the first three decades of the People's Republic of China (1949-79), economic development policy focused on urban industrialization. In rural China, farmers were organized into communes and a household registration system prevented migration to urban areas.

Farm prices were kept low to subsidize urban consumers and processors, depressing rural incomes. There was little nonfarm employment in rural areas and the farm population grew steadily until population control policies in the 1970s reduced birth rates. At the start of rural reforms in 1979, after communes were dismantled and the government began to encourage development of rural industry, the Chinese population was still 82 percent rural.

During the 1980s and 1990s, China's burgeoning and increasingly market-based economy improved the welfare of farmers and provided nonfarm opportunities for rural residents. The rural share of population fell to 64 percent in 2000 and over 100 million rural nonfarm jobs were created, but there is still a long way to go. In 2000, China had 328 million rural people working in agriculture, and per capita income for rural residents of China was just 2,253 yuan, or \$270. In order to raise incomes and productivity of rural residents,



China will need an exodus of farm labor similar to what occurred in the United States during the 20th century, but on a much larger scale. Some observers estimate that China has over 200 million "surplus" farm workers who need to be put to work in other sectors.

Leave the Land, Not the Countryside

How will this transfer of labor take place? In the United States, large migrations from farms to cities and rural industrial development occurred with little government planning or regulation. In general, China has rapidly increased its reliance on markets to allocate resources and accomplish policy objectives, but government planning and guidance are prominent in its approach to addressing rural problems. Most new jobs are being created in cities, but China's government leaders are concerned about possible social and political instability that could result from massive rural-urban migration. The government continues to limit the flow of rural people to cities by maintaining the household registration system (although restrictions are being loosened), and it is trying to engineer migration patterns by encouraging small city and town development.

The government's affinity for central planning is evident in its small town development policy— a massive effort to construct towns and small cities across the country to absorb excess population no longer needed on farms. This "rural urbanization" policy is symbolized by the slogan, "Leave the land, but not the countryside; enter the factory, not the city." The goal is to channel agricultural laborers into new towns and small cities that are close to the countryside. Small mar-

Urban Statistics in China

China's urban population statistics can be based either on where people live or on their official registration status. Administratively, China's territory is divided into over 2,000 counties and urban districts. In statistical reporting, counties are often termed "rural" (as opposed to urban districts), but counties adjacent to large cities are sometimes included in city population totals reported in statistical publications. For example, the Beijing municipality (which has administrative status equivalent to that of a Province) includes a city proper, plus four inner suburban districts, three outer suburban districts, and seven outlying counties. To make matters more confusing, towns or small cities within a county are considered "urban" and many urban districts include large swathes of functionally rural areas. Some urban statistics on population, land, agricultural production, or other items include all the districts and counties under a city's administration, while others do not.

Another common measure of urban population is based not on where people live, but on their household registration status. Persons are classified as either "agricultural" or "nonagricultural," usually based on the household head's occupation. Agricultural/nonagricultural is often synonymous with rural/urban in Chinese population statistics. The nonagricultural population consists of mostly employees of the government or state-owned enterprises and their dependents. Most of the nonagricultural population live in cities, although teachers, doctors, and administrators in rural areas also are classified as nonagricultural. In Beijing city proper, most of the population is nonagricultural, but in Beijing's counties 700,000 of the 3 million residents are nonagricultural. In China's small towns, over 55 percent of residents are "agricultural." China's 2000 population census was the first to count people on the basis of their actual residence, and it found a much larger number of urban people than was reported in previous statistics.

Beijing municipality administrative divisions

Measure	Unit	City proper	Inner suburbs	Outer suburbs	Counties
Land area Population Nonagricultural	Square km Million	87 2.6	1,283 4.9	4,105 1.7	11,333 3.0
population	Million	2.4	3.6	0.6	0.7
Villages*	Number	0	342	1,548	2,142
Townships	Number	0	0	28	57
Towns	Number	0	1	38	66

^{*}Administrative village committees.

Source: Beijing Municipal Statistical Bureau, 1999 Beijing Statistical Yearbook.

ket towns and townships are being upgraded into incorporated towns, and major towns are being developed into small cities. (In China, towns are considered "urban,"

while townships are "rural"—see box, "Urban Statistics in China.")

An example is the Shanghai municipal government's plan to develop 11 new satellite cities and



Photo courtesy Fred Gale, Economic Research Service, USDA.

22 centralized towns as part of its 2001-2005 5-year plan. The first satellite city, Songjiang, will take 5 years to construct, cover 14 square miles, and have a population that is expected to reach 500,000. The plans aim to attract urban middle-class Shanghai residents to move to Songjiang to start businesses that will employ migrants from the surrounding rural villages. Plans include installation of modern communications and electrical power infrastructure.

The success of China's small town urbanization policy is crucial to the country's ability to spread the benefits of economic growth and to maintain social stability. Policymakers anticipate that rural people will find higher paying jobs in towns and cities. By turning subsistence farmers into urban consumers, it is reckoned that demand for housing, appliances, and other items will rise. Infrastructure investment in new towns and cities is also expected to help pump more demand into the economy. Planners also believe that urbanizing the population will reduce the land area used for housing (freeing more land for crop production), improve education, and slow population growth.

Urbanization Is Underway

Since the 1990s, controls on population movement have weakened, and many rural people have migrated to cities, often illegally. China's agricultural census reported that 57.3 million rural residents were working in urban areas in 1996. Other reports suggest that 100 million rural Chinese moved to cities during the 1990s. The 2000 census showed that the urban share of population had reached 36 percent, much higher than the urban share shown in earlier population estimates. At the same time. more places were given city or town status, which carries prestige and other benefits. The number of cities grew from 479 to 667 during the 1990s, and the number of towns grew from 11,392 to 19,216. There are plans to establish 10,000 more small cities and towns in future years. China's planners project that the urban share of population will rise to 50 percent within the first two decades of the 21st century.

The government is hesitant to allow large-scale rural-urban migration, but the need to urbanize the population is widely accepted in China. Thus, the small town development thrust has been a high priority. A number of Provinces have

been experimenting with reforms of the household registration system that allow rural people to move to small cities and towns, and Guangdong will be the first Province to register people according to where they live rather than agricultural-nonagricultural classification. In 2001, a major national reform allowed rural people to apply for permanent urban residence, but the policy is limited to county-level cities and administrative towns, and the "catch-22" is that one has to have already established residence and employment in a city or town before applying for official residence.

Rural Urbanization in China's Development

In the early years of economic reforms after 1978, China focused development efforts on a few coastal cities. Gradually, economic growth spilled over to inland areas, and "rural urbanization" began to appear in Guangdong Province, adjacent to Hong Kong; Zhejiang Province to the south of Shanghai; and southern Jiangsu Province to the north of Shanghai (see map, p. 17). These areas are noted for transformation of rural villages to modern towns and cities. For example, Shenzhen, the most prominent of China's "special economic zones," began as a village.

This rural urbanization was based on highly successful, often export-oriented, village-owned manufacturing enterprises. These enterprises benefited from China's related policy of encouraging the development of rural industry, which accounts for a large share of national output and exports. There are several models of Chinese rural industry growth. Areas in Guangdong Province benefited from ties to Hong Kong, as enterprises grew



During the 1990s, small towns also flourished in other coastal Provinces, such as Fujian and Shandong, and in other rural areas in advantageous locations, such as in the suburbs of Beijing. These places did well because they had access to export markets or enjoyed spillovers from growing cities.

Huge Investment Needed

The challenge faced by China is to somehow reproduce the rural urbanization model on a massive nationwide scale. If the entire "surplus" agricultural population were relocated to towns, it would more than double the current town population of 170 million. Thus, a huge number of new towns will need to be established, after having already increased during the 1990s by over 7,800 (fig. 1) (the number of small cities grew by 173).

Huge investment will be needed to build housing, roads, water and sewer, electric and gas systems for new towns. Some commentators have argued that new towns will boost investment demand. However, it is not clear where the investment funds will come from. In wealthy areas (almost exclusively on the coast), investment in small towns has occurred at a rapid pace, but investment funds will be more difficult to come by for towns in less favorable locations. Reports suggest that many local governments are already in serious financial difficulty, with many near

bankruptcy and local officials and teachers going unpaid for months at a time (*Zhongguo Xinwen Zoukan*). The capacity of new towns to invest in infrastructure depends on their ability to create jobs and develop industry. There will be no way for local governments to pay back borrowed funds without a strong local tax base, and private investment in housing will not occur unless there are jobs and income for new residents.

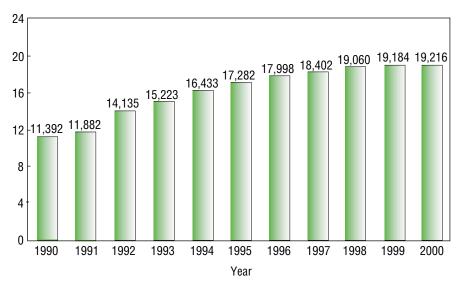
Job Creation Is Key

While there is much discussion about developing small towns and the advantages of this approach to urbanization, there is little discussion of how jobs will be created to support new residents. An urban place must have an economic base to provide jobs and incomes for its residents. Once the economic base is in place, jobs with input suppliers and retail/service businesses spring up as income from "basic" industries is respent in the economy. In successful examples of rural urbanization in China, the economic base was often township and village enterprises. Other towns derived their economic base from their geographic location as a center for regional trade, transportation, or government.

Increases in rural industrial employment large enough to absorb huge numbers of rural migrants seem unlikely. China's manufacturing industries are already suffering from overcapacity in many sectors; hence, large-scale investment in new production seems unlikely. Growth of rural industry stalled in the late 1990s due to reduced demand during the Asian financial crisis, a major consolidation of the textile industry, and difficulties obtaining credit in rural areas. Greater competition as

Figure 1
Number of towns in China, 1990-2000
Towns nearly doubled in number during the 1990s

Thousands



Note: A town is a seat of county government or other officially recognized urban space that does not meet the criteria for being a city (see "Urban Statistics in China").

Source: China National Bureau of Statistics, China Statistical Abstract 2001, Beijing: China Statistics Press, May 2001.

Table 1 China rural industry worker productivity and town financial revenue by region, 1999

Eastern towns have much stronger nonfarm industry and financial revenue

			Region	
Measure	Unit	East	Central	West
Rural industry Average town employment Value added per worker ¹ Value of exports Average town	Number Dollars Billion dollars	5,277 3,360 91.8	3,445 2,270 8.3	1,909 1,573 1.6
financial revenue	Thousand dollars	1,600	580	400

¹Value added divided by employment for township and village industry (gongye) enterprises.

Note: Values were converted to dollars using exchange rate of 1 dollar = 8.27 yuan. Sources: ERS calculations based on data from Zhongguo Xiangzhen Qiye Nianjian 2000 (China Township and Village Enterprise Yearbook, 2000), and Zhongguo Nongcun Xiangzhen Tongji Gaiyao 2000 (China Statistical Survey of Rural Townships and Villages, 2000).

a result of China's membership in the World Trade Organization will dampen job growth in many industries by increasing the pressure to cut costs.

Links to urban markets, capital investment, skilled workers, and technology are becoming more important as both Chinese and overseas consumers increase their demand for quality products. Markets will change more rapidly and competition will increase as China opens its borders to more imports, putting a premium on market information, technology, management, and skilled labor. Large urban areas often have better access to these factors of production, making it more difficult for rural enterprises to compete.

As in the United States, processing of agricultural products is often mentioned as a potential source of jobs and income for small towns in China. For example, plants producing ethanol, corn sweeteners, and other value-added products are being constructed in corn-producing Provinces of north-

ern China. However, this valueadded rural job creation strategy would go against current trends. For many types of processing, large modern facilities are being built in centralized locations (usually cities) where they can collect large quantities of raw agricultural commodities from a wide area, operate on a large scale to reduce per-unit costs, and be near consumer markets and ports (also in cities). New technologies and management practices, better sanitary control, and quality are also increasingly important in food processing industries. Consolidation of China's meat industry into fewer, larger, wellfinanced companies is expected to improve sanitation, quality, and export potential, but may reduce employment.

Weak Industry in Interior Provinces

While development of small towns in coastal areas has been hugely successful, the ingredients for success may be missing in China's interior Provinces and even in less-developed regions of coastal Provinces.

The diversity among China's regions can be seen by comparing worker productivity in rural industry across regions (table 1). Separate statistics are not available for industries in towns, but statistics for township and village enterprises reflect the types of industries located in towns and small cities. Nonfarm employment (in rural township and village enterprises) averaged 5,277 workers in eastern towns, 3,445 in central towns, and 1,909 in western towns (these figures may exclude self-employment or jobs in privately owned businesses). In 1999, value added (gross receipts minus cost of input materials) per worker for township and village industrial enterprises in eastern Provinces was 50 percent higher than in central Provinces and double the average in China's west. About 90 percent of township and village enterprise exports came from coastal Provinces.

Since industry is much stronger in eastern Provinces, towns have a stronger tax base and better financial performance in the east. The average financial revenue reported by towns in the eastern (coastal) region was equivalent to \$1.6 million in 1999 (using the exchange rate of 8.27 yuan per dollar). By comparison, financial revenue averaged only about one-third as much in other regions: \$580,000 in central Provinces and \$400,000 in western Provinces (table 1).

Ingredients for Success

Several key ingredients are needed in order for China's small town development policy to succeed. As indicated above, development of a strong economic base in small towns and cities is essential to create jobs for residents and



build a local tax base. Plans and development policies must be aligned with trends in industry and trade. Planners should avoid developing more towns than a region can viably support.

Improved education is essential to successfully incorporate rural residents into the nonagricultural work force. Rural persons have not only fewer years of education, but also poorer educational facilities,

fewer books, and teachers with less training.

Improved rural transportation links are also essential. More and better roads and either public or private transportation services will allow rural people to shop, work, and attend school in towns even if they maintain their residence in a rural village. Agricultural economist D. Gale Johnson, citing the huge infrastructure cost of moving peo-

ple from villages to towns, has recommended that farm families keep their residences in villages and commute to nonagricultural jobs in nearby towns. Instead of leaving agriculture and rural areas altogether, many would become part-time farmers, involving less drastic change for rural families. There is already a great deal of commuting and temporary migration in rural China. Analysis of China's 1997

Figure 2 **China Provinces and regions** West Heilongjiang Central laner Mongolia Xinjiang **Lia**oning <u>Pianiin</u> Hebei Shanxi Qinghai Shandong **East** Gans Shaanxi Tibet Jiangsu Henan Shanghai Sichuan Chong Hubei qing Zhejiano Jiangx, Hunan Guizhou Fujian Yunnan Guangdong Guangxi aiwan Hong Kong Hainan

Source: Prepared by the Economic Research Service.

agricultural census shows that about half of rural people engaged in nonagricultural work were doing so outside of their home township, with about equal proportions engaged elsewhere in their home county, elsewhere in their home Province, and outside their Province.

Better transportation between villages and towns will also help towns to develop as regional retail and wholesale trade centers.

Rural America's Competitor and Customer

Small towns and villages in China will impact rural America as both competitors and potential customers. China is among the largest producers and consumers of many major commodities, including wheat, corn, rice, and cotton, and is an important importer of soybeans. The ability of its farmers to compete in a more globalized market after China joins the WTO could have enormous implications for U.S. farmers and their communities. The success of China's rural urbanization policies in reducing agricultural labor input and modernizing its agricultural sector will be a key factor.

It is not clear how small town development will affect agriculture in China. Advocates suggest that moving rural people from village houses to small town apartment buildings will free up more land for

crops. Concentrating the population in towns and cities may make it easier to consolidate the country's fragmented land holdings into larger, more efficient plots to take advantage of mechanization, economies of scale, and commercialization of agriculture. However, there are also reports of towns and townships seizing farmland for urban development and sometimes wasteful, duplicative construction of buildings and infrastructure. At least one economist has argued that concentrating population in large cities would save even more land for agriculture (Jia).

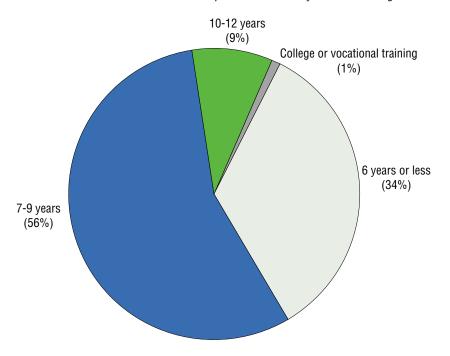
Town and village industry in China is also an important competitor for U.S. rural industry. If China is successful in creating jobs for new small town residents, much of the employment will likely come in industries that are important in the rural United States. China's leading exports to the United States include toys, footwear, clothing, housewares, and consumer electronics, many of which are important employers in U.S. small towns.

There is much concern over whether U.S. businesses can compete with overseas industries that pay much lower wages. The average annual salary for township and village enterprise workers in 1999 was equivalent to \$628, based on the official exchange rate. However, productivity of workers in Chinese industry is also very low, since workers are less skilled and work with much less capital. Less than 10 percent of workers in China's rural nonagricultural jobs have completed 10 or more years of schooling (fig. 3). By comparison, 80 percent of rural U.S. workers have completed high school. Value added per worker (a measure of labor productivity) in China's township and village enterprises ranges between

Figure 3

Chinese rural nonfarm workers by years of schooling, 1997

Most workers in rural industries have completed less than 10 years of schooling



Note: Includes persons whose primary employment was in industry, construction, transportation, wholesale-retail trade, and other nonagricultural industries. Excludes persons employed primarily in crop planting, livestock husbandry, forestry, and fisheries.

Source: Estimated by ERS from 1-percent sample of rural households selected from China's 1998 agricultural census.



Value added per worker for selected manufacturing industries— United States and rural China, 1997

U.S. workers have much higher productivity than workers in rural China

Industry	Rural China	United States	Ratio
		U.S. dollars	
Food manufacturing Beverages Textiles Apparel Paper Chemicals Petroleum products Stone, clay, and glass products Primary metals Fabricated metal products Machinery	2,780	111,600	40
	2,800	209,300	75
	2,680	60,500	23
	2,240	47,500	21
	2,470	122,400	50
	3,760	254,600	68
	3,900	349,500	90
	1,780	98,600	55
	3,700	113,500	31
	2,860	75,700	26
	3,345	97,100	29
Electrical equipment Electronics and communications	3,825	96,400	25
	3,050	149,400	49

Note: Table includes selected manufacturing industries in roughly comparable categories. "Rural China" includes township and village enterprise. "United States" includes all manufacturing establishments. Calculations assumed 8.27 yuan per dollar. All data are for 1997.

Source: ERS calculations using data from Zhongguo Xiangzhen Qiye Nianjian 1998 (*China Township and Village Enterprise Yearbook, 1998*), and United States 1997 Economic Census.

\$2,000 and \$4,000 (table 2). According to U.S. economic census data, value added per worker in U.S. manufacturing averaged \$108,000 in 1997. In the apparel industry, for example, the average U.S. worker produced output worth \$47,500, 21 times the average output of rural Chinese workers in that industry. Thus, according to these

figures, it would take 21 workers in rural China to produce the same value of output produced by 1 worker in the United States. The U.S.-China productivity ratio is even higher in other industries that are more capital- and skill-intensive.

The productivity ratio is 40 in food products manufacturing, 68 in chemicals, and 90 in petroleum processing. Industries with high levels of skill, technology, and capital investment per worker will be in a better competitive position than those that rely on less-skilled labor.

China's new towns could also become customers for American products and services. As huge numbers of rural people move from subsistence agriculture to urban life, their demand for meat, poultry, and edible oils will expand rapidly. This will aid U.S. farmers by increasing demand for feed grains and oilseeds. If small town development allows China's agriculture to modernize, the demand for fertilizers, farm machinery, seed technology, breeding stock, and other advanced inputs will rise. The huge investment needed to build small towns and cities will increase China's demand for construction and telecommunications equipment. New manufacturing and processing capacity in towns will increase demand for industrial machinery and instruments. RA

For Further Reading . . .

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